

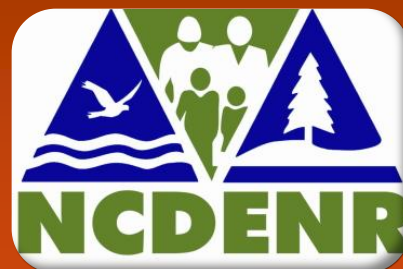
Annual Regulatory Report

NC Ecosystem Enhancement Program

FY 2011-12



This report covers the period beginning July 1, 2011 through June 30, 2012. It documents the program status of an operating agreement among the USACE and NCDENR signed July 28, 2010.



NC Department of Environment and
Natural Resources
NC Ecosystem Enhancement Program
[http://portal.ncdenr.org/web/eep.](http://portal.ncdenr.org/web/eep)



February 11, 2013

Col. Steven A. Baker, Commander
U.S. Army Corps of Engineers
Wilmington District
P. O. Box 1890
Wilmington, N.C. 29402-1890

Charles Wakild, Director
N.C. Division of Water Quality
512 N. Salisbury St., 1817 MSC
Raleigh, NC 27699-1817

RE: 2011-12 EEP Regulatory Report

Dear Col. Baker and Mr. Wakild:

The Ecosystem Enhancement Program (EEP) is pleased to submit the Annual Regulatory Report of State Fiscal Year 2011-12 to the U.S. Army Corps of Engineers (USACE), Wilmington District and the N.C. Division of Water Quality. This annual report addresses the period beginning July 1, 2011 and ending June 30, 2012. The materials presented within provide information as required under Section III, Part J of the In-Lieu Fee (ILF) Instrument signed into effect on July 28, 2010.

Highlights of this report include:

- Detailed reports for each of EEP's four ILF programs.
- Performance information and action strategies for each EEP ILF Program, and
- All program requirement ledgers and asset ledgers.

Please contact me should you have any questions regarding this report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael Ellison', is written over a horizontal line.

Michael Ellison
Deputy Director
Ecosystem Enhancement Program

Encl.

Restoring... Enhancing... Protecting Our State

North Carolina Ecosystem Enhancement Program, 1652 Mail Service Center, Raleigh, NC 27699-1652 / 919-707-8975 / <http://portal.ncdenr.org/web/eep>



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Introduction

This report covers the period beginning July 1, 2011 through June 30, 2012 (FY 2011-12). It documents the status of the each of EEP's four In-Lieu Fee (ILF) mitigation programs. The report is intended to provide supplemental information to EEP's Annual Report. It is expected that the format of this report will evolve as improvement and adjustments are suggested and made by the U.S. Army Corps of Engineers (USACE), the N.C. Division of Water Quality (DWQ), and other interested parties. For more information about the formal agreements between EEP and these agencies, visit EEP's website at <http://portal.ncdenr.org/web/eep>.

Report Structure

This report has five main sections, plus supporting maps and appendices.

Section I. NCDOT Stream and Wetland ILF Program (NCDOT ILF)

[\[Click here to link to Section I.\]](#)

Section II. Statewide Stream and Wetland ILF Program (Statewide ILF)

[\[Click here to link to Section II.\]](#)

Section III. Riparian Buffer Mitigation ILF Program (Riparian Buffer ILF)

[\[Click here to link to Section III.\]](#)

Section IV. Nutrient Offset ILF Program (Nutrient Offset ILF)

[\[Click here to link to Section IV.\]](#)

Section V. Compliance Action Strategies by Cataloging Unit

[\[Click here to link to Section V.\]](#)

Section 1. NCDOT Stream and Wetland ILF Program

EEP's NCDOT Stream and Wetland ILF Program was initiated in 2003 and is designed to provide advanced stream and wetland mitigation for NCDOT transportation projects. The goal of the program is to develop and provide watershed-based successful mitigation five years in advance of transportation project permitting. Annually, the NCDOT provides EEP their projected mitigation needs for the seven-year NCDOT Transportation Improvement Program.

This section of the report provides specific information with regard to EEP's NCDOT Stream and Wetland ILF Program. It describes the mitigation projects within the program, total and net quantities of mitigation credits, program requirements and ledgers, and compliance and financial information.

Project List

The NCDOT Stream and Wetland ILF Program's stream and wetland restoration, enhancement, creation and preservation projects as of June 30, 2012 are listed in [Appendix I.A.1](#).^{1,2} The projects are listed alphabetically and provide river basin, eight-digit Cataloging Unit (CU), and project phase information. A [map showing NC river basins and CUs](#) can be found near the end of this report.

[Appendix I.A.2](#) lists the EEP's High Quality Preservation (HQP) projects within the NCDOT Stream and Wetland Program by ecoregion. HQP projects are stream and wetland preservation projects that meet higher and more stringent criteria such as quality, rarity, uniqueness, buffer widths and others, than standard preservation projects. All of EEP's HQP projects were approved by a rigorous interagency review panel. HQP credits have an ecoregion service area, meaning that they are authorized to offset mitigation requirements deriving from within one of eight identified ecoregions in North Carolina. The last page of this report provides a [map of the ecoregions](#) and eight-digit CUs for reference. Preservation and HQP mitigation credits are only utilized to offset mitigation requirements beyond the 1:1 restoration requirement (i.e., the restoration equivalent portion of a mitigation requirement).

Gross Assets

[Appendix I.B.1](#) is a summary of the NCDOT Stream and Wetland ILF Program gross assets by river basin and CU. Gross assets are the total credits associated with projects within the program. These numbers

¹ It should be noted that some projects were initiated by NCDOT prior to the inception of the EEP and were transferred to EEP for implementation and/or management of the remaining mitigation credits. EEP utilizes these mitigation credits according to the guidelines of EEP's operating agreements with the regulatory agencies. The projects that were initiated by NCDOT as full-delivery projects are currently under contract with NCDOT, but the mitigation credits were transferred to EEP and are available for debiting for the purposes of EEP.

² All usage of mitigation credits is subject to credit-release schedules. Some credits from projects initiated and developed by the NCDENR Wetlands Restoration Program have been partially acquired for usage within the NCDOT Stream and Wetland ILF Program and are listed.

are subject to change as design and/or monitoring results are received, or as new projects are added into the program. Former NCDOT sites that were completed and/or partially debited prior to the formation of EEP contain only the remaining credits from each site that were transferred to EEP. This means that only the remaining credits (as determined by NCDOT and USACE) were summarized in this table for NCDOT-transferred projects.

[Appendix 1.B.2](#) summarizes the total HQP mitigation credits within the program by ecoregion. Gross stream and wetland asset quantities are subject to change as additional survey work is completed on these sites.

Net Assets

[Appendix 1.C.1](#) is a summary of the net remaining assets associated with restoration, enhancement, creation and preservation projects that EEP currently has available to meet future compensatory-mitigation requirements in the NCDOT Stream and Wetland ILF Program. Note that the assets have been converted into restoration and restoration-equivalent credits in this table. The amounts of mitigation provided in the table are the unused portion of mitigation credits on project sites and include both released credits and unreleased credits. Where credit-release schedules have been established, EEP will debit from these projects only after the credits have been formally released by the regulatory agencies. Net assets are mitigation credits developed in advance of permitted impacts.

[Appendix 1.C.2](#) summarizes the net remaining HQP assets available for future debits by ecoregion. No new HQP closings were completed during fiscal 2011-2012. More than \$74 million has been spent to date to protect these unique conservation lands. All HQP net assets are released credits and available for immediate usage. NCDOT impact projections indicate that most of these net HQP mitigation credits will be fully utilized within the current NCDOT Transportation Improvement Program.

Requirements and Asset Ledgers

All of the permitted requirements within the NCDOT Stream and Wetland ILF Program and the associated asset debits that have been utilized to satisfy those requirements are listed in [Appendix 1.D.1](#).

There are two sets of asset ledgers – one for standard stream and wetland projects and one for HQP projects. [Appendix 1.D.2](#) contains the combined asset ledgers for the standard stream and wetland mitigation projects within the NCDOT Stream and Wetland ILF Program and within the Statewide Stream and Wetland ILF Program, and all of the transactions associated with those projects. [Appendix 1.D.3](#) contains the asset ledgers for HQP projects along with all of their transactions.

Advanced Credit Ledger

The U.S. Army Corps of Engineers allocated advance credits (as defined by federal rules) to EEP as part of the EEP's ILF Instrument. Advance credits were allocated by river basin and eight-digit CU. The advance credits were awarded to EEP for use in both the NCDOT Stream and Wetland ILF Program and the Statewide Stream and Wetland ILF Program. Available advance credits may be transferred from one CU to another within the same river basin with prior approval from the agencies that are party to the Instrument. [Appendix 1.E.1](#) summarizes the beginning balance, utilization and ending balances of EEP's

advance credits as of June 30, 2012. [Appendix I.E.2](#) shows the EEP Advance Credit Ledger, which details the advance credit transactions for each cataloging unit.

Compliance

The NCDOT Stream and Wetland ILF Program continued to achieve excellent compliance in meeting its permit requirements during fiscal 2011-12. Table I-1 summarizes these results in credits.

Table I-1. NCDOT Stream and Wetland ILF Program Requirements and Compliance

DOT Program Type	Requirements Due (Credits)	Requirements Met (Credits)	Requirements Not Met (Credits)	Compliance (Credits)	Net Assets (Credits)
Stream	384,904	384,904	0	100.00%	724,150
Wetlands	1,022	1,017	4	99.57%	9,605

[Appendix I.F](#) provides detailed information about noncompliance, including the specific permits, for the NCDOT Stream and Wetland ILF Program. A narrative addressing EEP action plans for noncompliant CUs is included in [Section V](#) of this report.

Expenditures

The expenditures of funds from the NCDOT Stream and Wetland ILF Program accounts during FY 2011-12 are summarized in Table I-2, below.

Table I-2. FY 2011-12 NCDOT Stream and Wetland ILF Program Expenditures

Payment Type	NCDOT Stream and Wetland Program
	2984 & 2930-9303 & 2930-9304
Full Delivery (45.2%)	\$9,066,141.10
Administration (22.1%)	\$4,442,059.90
DBB-Construction/Repair (11.5%)	\$2,305,011.11
Intra-Program Credit Purchases (8.6%)	\$1,735,360.5
DBB-Design (7.0%)	\$1,398,525.71
DBB-Monitoring & Maintenance (3.6%)	\$727,369.26
DBB-Acquisition (1.9%)	\$377,727.83
Watershed Planning (0.1%)	\$25,658.48
Total	\$20,077,843.89

Section II. Statewide Stream and Wetland ILF Program

The EEP Statewide Stream and Wetland ILF Program assists developers and others who must comply with state and federal stream and wetland mitigation permit requirements. The voluntary program allows developers to choose to make a payment to EEP rather than provide the mitigation themselves. EEP then becomes responsible for the stream and/or wetland mitigation and implements watershed-based projects to meet the permitted requirements. Before requesting to participate in the program, developers must verify compliance with [Session Law 2009-337](#) and [Session Law 2011-343](#) and other rules that govern when EEP's ILF program may be an option for satisfying compensatory mitigation.

The Statewide Stream and Wetland Mitigation Program began under legislation passed in 1996 and is the oldest ILF program in North Carolina. Unlike the NCDOT Stream and Wetland ILF program, where the NCDOT provides advanced funding to produce advanced assets five or more years ahead of permitted impacts, the Statewide Stream and Wetland ILF program does not operate on advanced funding. The Statewide ILF program is designed to provide mitigation assets one year from the fiscal year in which payments are made to the program. Since most requirements paid into the program are quite small, often multiple payments are required to fully fund a single mitigation project.

A major objective of the Statewide ILF program is to have program applicants pay the actual costs incurred for operating the program. Providing small mitigation requirements at actual costs requires a delicate balance of building assets in the proper sizes and amounts in each of the CUs to offset permitted requirements, while maintaining sufficient funds to pay for the required mitigation projects. In order to capitalize on efficiencies of scale, restoration projects sizes tend to be large. On the other hand, Statewide ILF program mitigation requirements tend to be very small. Thus, there is always the potential to create surplus assets in some CUs and deficits in other CUs. The Statewide ILF program, as it is currently configured, is at optimal performance when there are zero surplus assets and zero requirement deficits, and sufficient funds remain to pay for existing projects.

Project List

[Appendix II.A](#) contains a complete listing of the stream and wetland restoration, enhancement, creation and preservation projects associated with the Statewide Stream and Wetland ILF Program at the close of the fiscal 2011-12. The projects are listed alphabetically.

Gross Assets

[Appendix II.B](#) is a summary of the Statewide Stream and Wetland ILF Program's gross assets by river basin and CU. Gross assets are the total credits associated with projects within the program. These numbers are subject to change as design and/or monitoring results are received or as new projects are added into the program.

Net Assets

[Appendix II.C](#) is a summary of the unused mitigation credits associated with restoration, enhancement, creation and preservation projects that the Statewide Stream and Wetland ILF Program has available to meet future compensatory-mitigation requirements.

Requirements and Asset Ledgers

[Appendix II.D.1](#) presents the Statewide Stream and Wetland ILF Program Requirements Ledger. This ledger lists all of the permitted mitigation requirements associated with the Statewide Stream and Wetland ILF Program and the associated project debits made to those requirements.

[Appendix I.D.2](#) contains the combined asset ledgers for the standard stream and wetland mitigation projects within the NCDOT Stream and Wetland ILF Program and within the Statewide Stream and Wetland ILF Program and all of the transactions associated with those projects.

Advanced Credit Ledger

The U.S. Army Corps of Engineers allocated advance credits (as defined by federal rules) to EEP as part of the EEP's ILF Instrument. Advance credits were allocated by river basin and eight-digit CU. The advance credits were awarded to EEP for use in both the NCDOT Stream and Wetland ILF Program and the Statewide Stream and Wetland ILF Program. Available advance credits may be transferred from one CU to another within the same river basin with prior approval from the agencies that are party to the Instrument. [Appendix I.E.1](#) summarizes the beginning balance, utilization and ending balances of EEP's advance credits as of June 30, 2012. [Appendix I.E.2](#) shows the Advance Credit Ledger, which details the advance credit transactions for each CU.

Compliance

The Statewide Stream and Wetland ILF Program continued to achieve excellent compliance in meeting its permit requirements during FY 2011-12. Table II-1 summarizes these results in credits.

Table II-1. Statewide Stream and Wetland ILF Program Requirements and Compliance

Statewide Program Type	Requirements Due (Credits)	Requirements Met (Credits)	Requirements Not Met (Credits)	Compliance (Credits)	Net Assets (Credits)
Stream	526,233	525,111	1,121	99.79%	50,009
Wetlands	900	884	16	98.21%	250

[Appendix II.F](#) provides lists the specific permits in the Statewide Stream and Wetland ILF Program that are not fully compliant. A narrative addressing EEP action plans for noncompliant CUs is included in [Section V](#) of this report.

Expenditures

The expenditures of funds from the Statewide Stream and Wetland Mitigation Program account during FY 2011-12 are summarized in Table II-2, below.

Table II-2. FY 2011-12 Statewide Stream and Wetland Mitigation Program Expenditures

Payment Type	Statewide Stream and Wetland Program
	2981
Intra-Program Credit Purchases (41.4%)	\$6,203,270.32
Full Delivery (26.7%)	\$4,010,726.35
DBB-Construction/Repair (10.9%)	\$1,630,598.34
DBB-Design (8.9%)	\$1,328,966.72
Administration (4.7%)	\$709,611.15
DBB-Acquisition (4.0%)	\$600,343.08
DBB-Monitoring & Maintenance (3.3%)	\$500,272.07
Watershed Planning (0.1%)	\$11,018.80
Total	\$14,994,806.83

Section III. Riparian Buffer Mitigation ILF Program

The EEP Riparian Buffer Mitigation ILF Program assists developers and others who must comply with state riparian buffer rules. The voluntary program allows developers to choose to make a payment to EEP rather than provide the mitigation themselves. EEP then becomes responsible for the riparian-buffer mitigation and implements projects to meet the permitted requirements. Before requesting to participate in the program, developers must verify compliance with S.L. 2009-337 and S.L. 2011-343 and other rules that govern when EEP's ILF program may be an option for satisfying compensatory mitigation.

The EEP Riparian Buffer Mitigation ILF Program started in 1999 in the Neuse River basin. The program later expanded to the Tar-Pamlico and Catawba River basins and a portion of the Cape Fear River basin (Randleman Watershed). This mitigation option is also now available to permit applicants who are required to comply with 2009 legislation requiring riparian buffer mitigation in the Jordan Lake watershed.

Project List

[Appendix III.A](#) contains a complete listing of the projects associated with the Riparian Buffer Mitigation ILF Program as of June 30, 2012, by river basin and eight-digit CU.

Gross Assets

The gross assets in the Riparian Buffer Mitigation ILF Program are summarized in Table III-1, below, and provided in greater detail in [Appendix III.B](#). Gross assets are the total credits associated with projects within the program. One credit of riparian buffer mitigation is equivalent to one square foot of riparian buffer restoration or three square feet of riparian buffer enhancement.

Table III-1. Riparian Buffer Mitigation Program Gross Assets Summary

Riparian Buffer Mitigation Program	Cape Fear	Catawba	Neuse	Tar-Pamlico	Grand Total
Gross Assets (Credits)	4,247,549	217,800	18,137,471	2,084,608	24,687,428

[Appendix III.B](#) is a summary of the Riparian Buffer Mitigation ILF program gross assets by river basin and CU. These numbers are subject to change as design and/or monitoring results are received or as new projects are added into the program.

Net Assets

The net assets in the Riparian Buffer Mitigation ILF Program are summarized in Table III-2, below, and provided in greater detail in [Appendix III.C](#). Net assets are unused credits available to meet future compensatory-mitigation requirements. All of EEP's riparian buffer credits are released credits.

Table III-2. Riparian Buffer Mitigation Program Net Assets Summary

Riparian Buffer Mitigation Program	Cape Fear	Catawba	Neuse	Tar-Pamlico	Grand Total
Net Assets (Credits)	0	76,826	75,680	0	152,506

Requirements and Asset Ledgers

All of the permitted requirements in the Riparian Buffer Mitigation ILF Program and the associated asset debits utilized to satisfy those requirements are shown in [Appendix III.D1](#). [Appendix III.D2](#) lists all of the project asset ledgers associated with the Riparian Buffer Mitigation ILF Program, and details all the debit transactions associated with those projects.

Compliance

The Riparian Buffer Mitigation ILF Program continued to achieve good overall compliance with meeting its permit requirements during fiscal 2011-12. The Cape Fear basin has one permit that is lowering the overall program compliance rate. This permit represents 53 percent of the unmet requirements across all river basins. Twice in the past, EEP initiated a project sufficient to satisfy this permit, but discovered legal constraints that made the projects infeasible. EEP successfully initiated five projects in 2011-2012 to address the Cape Fear needs and has issued a new request for FD proposals in 2012-2013 to satisfy the remaining permit requirements. Some advanced riparian buffer mitigation credits are available within each river basin.

Table III-3, below, summarizes compliance results by river basin.

Table III-3. Riparian Buffer Mitigation Program Requirements and Compliance

Riparian Buffer Mitigation Program	Mitigation Due (credits)	Mitigation Met (credits)	Mitigation Not Met (credits)	Compliance	Net Assets (Credits)
Cape Fear	8,106,843	5,980,809	2,126,033	73.77%	0
Catawba	140,974	140,974	0	100.00%	76,826
Neuse	18,987,546	18,071,284	916,262	95.17%	75,680
Tar Pamlico	2,655,302	2,081,536	573,766	78.39%	0
Overall	29,890,665	26,274,603	3,616,061	87.90%	152,506

The specific permits in the Riparian Buffer Mitigation ILF Program that are not fully compliant are listed in [Appendix III.E](#). A narrative addressing EEP action plans for noncompliant CUs is included in [Section V](#) of this report.

Expenditures

The expenditures of funds from the Riparian Buffer Mitigation ILF Program account during fiscal 2011-12 are summarized in Table III-4, below.

Table III-4. FY 2011-12 Riparian Buffer Mitigation Program Expenditures

Payment Type	Riparian Buffer Program
	2982
Full Delivery (59.8%)	\$1,279,131.00
Intra-Program Credit Purchases (36.0%)	\$768,950.83
Administration (2.5%)	\$54,471.16
DBB-Construction/Repair (1.1%)	\$22,561.25
DBB-Monitoring & Maintenance (0.6%)	\$12,938.35
DBB-Acquisition (0.002%)	\$34.20
Total	\$2,138,086.79

Section IV. Nutrient Offset ILF Program

EEP's Nutrient Offset ILF Program assists developers and others who must comply with state nutrient-management strategies and are unable to meet their reduction requirements onsite. The voluntary program allows developers who have met their onsite nutrient-reduction requirement to choose to make a payment to EEP to meet their remaining requirements. EEP then becomes responsible for the nutrient reduction and implements projects to meet the nutrient-reduction needs. EEP accepts payments for nitrogen reduction in the Neuse River basin and nitrogen and phosphorus in the Tar-Pamlico River basin, the Falls Lake watershed and (as of Sept. 1, 2010) in the Jordan Lake watershed. Before requesting to participate in the program, developers must verify compliance with S.L. 2009-337 and S.L. 2011-343 and other rules that govern when EEP's ILF program may be an option for satisfying compensatory mitigation.

Project List

A complete listing of the nitrogen and phosphorus reduction projects within EEP's Nutrient Offset ILF Program as of June 30, 2012 is included in [Appendix IV.A](#). The projects are listed alphabetically.

Gross Assets

The gross or total amount of nutrient-reduction credits within Nutrient Offset Program are summarized in Table IV-1, below, and provided in greater detail in [Appendix IV.B](#). One credit is equal to one pound reduction. Gross assets are the total credits associated with projects within the program.

Table IV-1. Nutrient Offset Mitigation Program Gross Assets Summary

	Cape Fear		Neuse		Tar Pamlico		Grand Total
	Nitrogen	Phosphorus	Nitrogen	Phosphorus	Nitrogen	Phosphorus	
Gross (Credits)	0	0	1,386,824	1,069	147,820	9,556	1,545,269

Net Assets

The net remaining or unused mitigation credits associated with the Nutrient Offset Program are summarized in Table IV-2, below, and provided in greater detail in [Appendix IV.C](#). All of these credits are released credits and available for use against future permitted nutrient-offset requirements. One credit is equal to one pound of reduction.

Table IV-2. Nutrient Offset Mitigation Program Net Assets Summary

	Cape Fear		Neuse		Tar Pamlico		Grand Total
	Nitrogen	Phosphorus	Nitrogen	Phosphorus	Nitrogen	Phosphorus	
Net (Credits)	0	0	27,451	1,035	98,606	6,255	133,346

Requirements and Asset Ledgers

All of the permitted requirements in the Nutrient Offset ILF Program and the associated asset debits utilized to satisfy those requirements are shown in [Appendix IV.D1](#). [Appendix IV.D2](#) lists all of the project asset ledgers associated with the Nutrient Offset ILF Program and details all the debit transactions associated with those projects.

Compliance

Overall compliance remained good throughout the fiscal year and finished at 99.15 percent, with 100 percent compliance in the Neuse basin, and 81.27 percent compliance in the Tar-Pamlico basin for nitrogen and 81.77 percent for phosphorus. Unutilized advanced mitigation credits are available in the Neuse and the Tar-Pamlico River basins.

Table IV-3, below, summarizes these results in credits.

Table IV-3. Nutrient Offset Mitigation Program Requirements and Compliance

Nutrient Offset Program	Requirements Due (Credits)	Requirements Met (Credits)	Requirements Unmet (Credits)	Compliance (Credits)	Net Assets (Credits)
Falls Lake Nitrogen	7,522.04	7,522.04	0.00	100.00%	9,075.14
Fall Lake Phosphorus	34.40	34.40	0.00	100.00%	1,034.55
Neuse Nitrogen	1,352,466.83	1,352,466.83	0.00	100.00%	19,269.90
Tar-Pamlico Nitrogen	60,554.92	49,214.69	11,340.23	81.27%	98,605.55
Tar-Pamlico Phosphorus	4,037.79	3,301.81	735.98	81.77%	6,254.52
Overall	1,424,615.98	1,412,539.77	12,076.21	99.15%	134,239.65

The specific requirements in the Nutrient Offset ILF Program that are not fully compliant are listed in [Appendix IV.E](#). A narrative addressing EEP action plans for noncompliant CUs is included in [Section V](#) of this report.

Expenditures

The expenditures of funds from the Nutrient Offset Mitigation Program account during fiscal 2011-12 are summarized in Table IV-4, below.

Table IV-4. FY 2011-12 Nutrient Offset Mitigation Program Expenditures

Payment Type	Nutrient Offset Program
	2982-9829
DBB-Construction/Repair (23.7%)	\$218,509.57
DBB-Acquisition (20.5%)	\$189,367.20
Full Delivery (18.8%)	\$173,373.96
Administration (17.0%)	\$157,161.74
Intra-Program Credit Purchases (15.9%)	\$146,629.69
DBB-Design (3.3%)	\$30,700.81
DBB-Monitoring & Maintenance (0.8%)	\$7,328.00
Total	\$923,070.97

Section V. EEP Compliance Action Strategies by Cataloging Unit (CU)

EEP continuously monitors its existing permit requirements, future projected mitigation needs and current mitigation asset inventory levels. Whenever there exists a permit requirement that is not fully satisfied, EEP develops an action strategy designed to address the credit shortfall. This section includes the EEP action strategies as of the end of fiscal 2011-12. For each watershed, the outstanding mitigation required is listed, along with background information about the CU and the immediate and/or long-range action plans.

CAPE FEAR 03030002

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	0.17 ac (Haw) 1.22 ac (Lower New Hope) 1.97 ac (Upper New Hope)	0

Background:

Cape Fear (Jordan) Buffer rules went into effect in August 2009 and EEP received the first payment for buffer mitigation in the Haw River arm or Jordan Lake in June 2010. In 2011, EEP received four more buffer mitigation payments for additional buffer mitigation requirements in the Cape Fear (Jordan), one additional payment in the Haw arm, one payment in the Lower New Hope and two payments in the Upper New Hope.

EEP issued Requests for Information (RFIs) in May 2012 for potential buffer mitigation credits available for purchased in the Lower and Upper New Hope arms but received no response. There is one existing mitigation bank located in the Upper New Hope arm of the watershed but the credits associated with the bank are classified as nutrient offset only. It is uncertain if the mitigation bank could seek to re-classify some of the nutrient offset credits for buffer credits. There are no other mitigation banks located in either the Lower or Upper New Hope arms of the Jordan watershed at this time.

EEP canvassed the existing LWPs and current active projects for buffer mitigation in the three different arms of the watershed. Thus far, no viable buffer mitigation sites in the Lower New Hope or Upper New Hope arms of the Jordan watershed have been identified. Currently EEP staff is continuing to search the area for suitable buffer mitigation sites in the Lower or Upper New Hope arms of the Jordan watershed.

A FD RFP was issued in November 2011 in the CU for stream mitigation and buffer mitigation for the Haw arm of the Jordan watershed. Proposals were received in April 2012 and EEP has initiated review of the

technical proposals. If there are viable mitigation projects, then EEP anticipates executing contracts before end of 2012.

EEP has received six small additional buffer mitigation payments for all three Jordan watershed arms that will become due in the next two fiscal years. Total additional buffer mitigation that is required is 0.20 credits in the Haw arm, 0.93 credits in the Lower New Hope arm, and 2.88 in the Upper New Hope arm.

CU Immediate Action Plan:

EEP staff members are continuing to search the area. Issuing another FD RFP remains possible for the buffer mitigation units needed in Lower and Upper New Hope arms.

CAPE FEAR 03030003

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	45.44 ac	0

Background:

The initial buffer rules for the Randleman watershed were passed in 1998 and 1999. EEP received its first Randleman riparian buffer payment from NCDOT on December 30, 2003. On August 17, 2007, EEP received its first non-NCDOT payment from a local government. EEP's first private payment was received on October 21, 2008. Almost all of the current requirements for buffer mitigation in this watershed are associated with NCDOT mitigation needs.

Since 2003, EEP and DWQ met frequently to discuss EEP Riparian Buffer Program rules and ILF operations specifically for the Randleman watershed. The main discussions centered on the appropriate area where buffer mitigation location can occur. The service area requirement for riparian buffer mitigation has gone through three iterations since the Randleman Riparian Buffer ILF program's inception. From inception 1999 until June 2007, DWQ agreed that riparian buffer mitigation located within the same 8-digit CU was an acceptable interpretation for meeting the locational riparian buffer mitigation requirement of being "the same distance from the ...estuary" as in the Neuse and Tar Pamlico basins and was considered appropriate for locating buffer projects for the Catawba or Randleman rules.

In June 2007, DWQ modified the locational requirement for all new EEP riparian buffer mitigation projects would be located in the Randleman watershed or upstream of the Randleman watershed to generate riparian buffer mitigation credits. The last modification to mitigation project service area occurred in December 2007 when NCDWQ issued the "Randleman Watershed Buffer Locational Requirements Buffer Interpretation/Clarification #2007-014" The clarification changed the service area requirement for future projects servicing Randleman riparian buffer requirements. The clarification specified that the location of mitigation subject to 15A NCAC 02B.0250 or the Randleman general Major Variance shall not extend outside of the Randleman Lake water supply watershed. This is the current service area for Randleman riparian buffer mitigation requirements.

EEP has issued at least five FD RFPs for buffer mitigation in the Randleman watershed. Only one FD RFP was successful and yielded five riparian buffer mitigation sites in 2011. EEP has had multiple other FD RFPs result in awarded riparian buffer projects that had to be subsequently terminated due to technical or legal issues. The first and largest project awarded would have generated over 4.7 million riparian buffer credits. EEP secured and recorded a conservation easement on the property only to discover later that the property had been associated with a previous permit requirement. Although EEP's easement was secured legally and EEP could have implemented a riparian buffer projects on the property, EEP voluntarily agreed to

release its conservation easement so that the original landowner could comply with his historical permit requirements.

EEP issued two FD RFPs during the fiscal year. The FD proposals were received in November 2011 and October 2012. One buffer mitigation site was submitted and awarded. Unfortunately, the project had to be dropped and the contract terminated three months later after NCDWQ determined that replanting a large cutover area on the project would not yield buffer credits as the site appeared to be undergoing natural restoration. The decrease in buffer mitigation acreage resulted in the project being no longer feasible and the mitigation provider terminated the project.

EEP is also utilizing buffer mitigation credits generated from several stream mitigation sites located in the CU. All of these projects were instituted prior to the change in service area location and were determined that the credits were acceptable by DWQ under the policies in place at the time the projects were initiated.

Because of the small size of the Randleman watershed, buffer restoration opportunities are scarce. EEP believes alternative and expanded forms of riparian buffer mitigation will likely be necessary to achieve current and future requirements.

CU Immediate Action Plan:

EEP has requested a meeting with NCDWQ to discuss the current outstanding mitigation requirements and expanded options for delivering buffer mitigation within the Randleman watershed.

CAPE FEAR 03030006

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	1.82	0
Non-riparian	0	0
Coastal Marsh	0	0

Background:

Stream and wetland mitigation needs in this CU have been historically low in activity level and the number of requirements and amounts is small. Since the beginning of Wetlands Restoration Program through the end of fiscal 2011-12, there have been a total of 15 mitigation requirements through the Statewide Stream and Wetland ILF Program and the NCDOT Stream and Wetland ILF Program (five stream and 10 wetland requirements). The projected riparian wetland mitigation needed has fluctuated over the past several years between small and large amounts.

During the fiscal 2010-11, EEP changed the design strategy at a mitigation project that historically had been targeted to produce stream and riparian restoration mitigation credits. The changed design eliminated the riparian wetland component on the project. The riparian wetland mitigation requirement currently listed as non-compliant were previous debited to that mitigation site.

CU Immediate Action Plan:

A FD RFP for stream and riparian wetland mitigation credits was issued in November 2011 and proposals were received in May 2012. EEP has initiated review of the technical proposals. If there are viable mitigation projects, then EEP anticipates executing contracts before the end of 2012. The current non-compliant riparian wetland mitigation requirements are associated with requirements that were due prior to the July 2010 EEP Instrument.

CU Long-Range Action Plan:

If EEP is unable to contract for the current outstanding riparian wetland mitigation needs, plus all of the future anticipated stream and riparian wetland mitigation needs, then another FD RFP will be issued for any remaining projected mitigation needed for this CU.

CAPE FEAR 03030007

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	452	77
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0

Background:

Since the beginning of Wetlands Restoration Program, there have been a total of 47 mitigation requirements through the Statewide Stream and Wetland ILF Program and the NCDOT Stream and Wetland ILF Program (nine stream and 38 wetland requirements). The majority of the stream requirements occurred prior to the creation of EEP and there had been two stream mitigation projects with sufficient credits to meet all of the needs.

During the previous state fiscal year, EEP terminated one of the mitigation projects producing stream mitigation credits after the property owner of the site requested to be released from the mitigation project. NCDOT recently accelerated a transportation project that is located in this CU which increased the future stream mitigation needs. Based on the future increased stream mitigation needs and the current stream mitigation requirements, EEP issued a FD RFP for stream mitigation credits which produced one new stream mitigation project. The size of the project was not sufficient to meet all of the needs in the CU.

CU Immediate Action Plan:

A second FD RFP was issued in June 2011 and proposals were received in November 2011. One additional stream mitigation site resulted from the second FD RFP and EEP anticipates the contract will be executed by the end of 2012. This project, along with the previously instituted mitigation project from the first FD RFP round, is sufficient to meet the current and projected stream needs in the CU.

CU Long-Range Action Plan:

There are no additional anticipated future streams or wetland procurement needs in this CU at this time.

CATAWBA 03050103

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	5.452	0.41
Non-riparian	1.632	0
Coastal Marsh	0	0

Background: (CT 03)

Catawba 03050103 is a very difficult CU for producing compensatory mitigation for streams and wetlands. The North Carolina portion of Catawba 03050103 is comprised mostly of the greater Charlotte metropolitan area. Most of this CU is located in South Carolina; however, EEP is unable to develop mitigation sites in South Carolina for utilization against wetland and stream impacts that occur in North Carolina. The information presented describes only the North Carolina portion of the CU. Most streams in Catawba 03050103 are degraded and have experienced the growing pains of urbanization and, more recently, suburban sprawl. Urbanization presents challenges in producing stream mitigation projects because of arduous constraints often in place along these streams.

Typical constraints include sewer lines along and in the streams; residential, industrial and commercial development in the floodplain; FEMA-regulated streams; hazardous waste; stormwater outlets; unknown pipe outlets; local ordinances; leaking sewer lines; chemical spills; local landfills near streams; the relative large size of streams per acre-watershed; large numbers of landowners per potential project site; etc. Each of these constraints limits the type and size of the potential mitigation projects, and also significantly increases the cost of these projects. Nevertheless, EEP has worked closely with Mecklenburg County, the City of Charlotte and the regulatory agencies to produce adequate stream-mitigation projects to compensate for impacts. However, since impacts are continuing at a consistent rate, it is likely that all mitigation providers will continue to struggle to produce traditional stream- and wetland-mitigation projects within the CU.

Wetlands restoration is extremely limited within this CU. Nearly all of remaining wetlands within the CU are located along large river floodplains, or are relatively small mafic-type depressional wetlands. These wetlands are continually being impacted, as development and urbanization is occurring at high levels within this CU. Restoration opportunities for these types of wetlands do not exist in any significant quantity within this CU. Most of the historical wetlands loss is currently occupied either by development or located along riparian systems. Wetlands restoration along riparian systems is also typically not possible because the streams are regulated under stringent FEMA no-rise regulations as well as local ordinances. In order to perform most riparian wetlands restoration, the stream level often needs to be elevated so that the stream can access its historic floodplain. FEMA and local regulations make this exceedingly difficult in most of this CU. Also, raising flood elevations is problematic because of the amount of floodplain development located in this CU. Finally, locating suitable wetlands restoration opportunities has been made more difficult because of soil mapping in Mecklenburg County. The current USDA NRCS soil survey for Mecklenburg has

not identified any hydric A soils. While hydric A soils certainly exist in Mecklenburg, the maps do not detail their locations. Typically, floodplains are mapped as Monacan soils, which often have hydric inclusions.

The overall degree of difficulty in identifying stream and wetland restoration opportunities is reflected in the results of all of the FD RFPs issued by EEP and WRP. There have been multiple RFP requests over the years with very few projects that were technically suitable. In 2006, the regulatory agencies recognized the difficulty of providing mitigation in this watershed when it expanded the service area of Catawba 03050103 to include the Catawba 03050102 CU and the lower portion of Catawba 03050101 CU (falling within or partially within the Southern Outer Piedmont Ecoregion).

To date, there have been 71 requirements paid and now due in either the Statewide Stream and Wetland ILF Program or NCDOT Stream and Wetland ILF Program for mitigation in Catawba 03050103. Of these, 44 have been stream requirements, 23 riparian wetland requirements and four non-riparian wetland requirements. The NCDOT ILF program has two stream mitigation requirements, five riparian wetland mitigation requirements and one non-riparian wetland mitigation requirement in Catawba 03, and the remaining stream and wetland requirements are in the Statewide ILF program. Currently, all 44 stream mitigation requirements have been fully met.

During the past year, compliance of the riparian wetland mitigation decreased and non-riparian wetland mitigation requirements improved. This decrease is a result of fewer than expected wetland credit generation from two existing mitigation projects. There are a total of 27 wetland requirements (23 riparian wetlands and four non-riparian wetlands) associated with the two ILF programs (Statewide and NCDOT ILF) which total 37.58 wetland credits. The unsatisfied wetland mitigation requirements are associated with five riparian wetland requirements (4 partially met) and one partially-met non-riparian wetland requirement.

EEP discussed non-riparian wetland impacts and associated mitigation issues in the Piedmont and mountain regions of the state at the February 2011 IRT meeting. Based on discussions at that meeting, the IRT instructed EEP propose riparian wetland mitigation credits for non-riparian wetland mitigation needs in future mitigation acceptance letters. The regulatory agencies will determine each application on a case-by-case basis. Some of the non-riparian wetland mitigation requirements were approved by the IRT and satisfied with available riparian wetland mitigation credits.

CU Immediate Action Plan:

To achieve the remaining outstanding mitigation requirements, EEP is actively pursuing a number of traditional and alternative strategies:

- EEP issued a new the FD RFP in November 2011 for non-riparian wetland mitigation wetland credits for the expanded Catawba 03050103 service area. That FD RFP yielded no potential mitigation sites. EEP issued another FD RFP in July 2012 for stream and riparian wetland mitigation credits.
- **Potential implementation of nontraditional projects based on the Charlotte Local Watershed Plan (LWP) Initiative.** Numerous sites identified through this planning effort have yielded nontraditional wetland and stream mitigation opportunities. In 2010, EEP presented these projects to the IRT and is awaiting a decision on the methodology to calculate mitigation credits before proceeding with these projects.

- **Evaluation of wetlands restoration on Chewacla soils.** EEP has discussed with USACE the possibility of pursuing wetlands restoration sites with Chewacla soil types in association with priority one stream restoration opportunities.

FRENCH BROAD 06010105

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0.47	0
Non-riparian	0	0
Coastal Marsh	0	0

Background:

French Broad 06010105 has had some stream and/or wetland mitigation requirements almost every year since the start of the N.C. Wetlands Restoration Program (WRP). Since the beginning of the WRP, there have been a total of 54 mitigation requirements through the Statewide Stream and Wetland ILF Program and the NCDOT Stream and Wetland ILF Program (37 stream and 17 wetland requirements).

EEP has developed two LWPs and several mitigation projects in this CU since the beginning of WRP. Up until the past fiscal year, the stream and wetland mitigation assets from the mitigation projects were sufficient to meet all current and future anticipated mitigation requirements. Only two of the mitigation projects have yielded riparian wetland mitigation credits. EEP completed construction on one of those mitigation projects and the generated riparian wetland credits were less than anticipated.

CU Immediate Action Plan:

EEP is planning to issue a FD RFP for riparian wetland mitigation during the next fiscal year.

CU Long-Range Action Plan:

A small amount of long-range riparian wetland mitigation needs are identified in this watershed at this time. EEP will include the future riparian wetland mitigation needs in FD RFP.

LUMBER 03040207

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	592.3	0
Riparian	0.982	0
Non-riparian	0	0
Coastal Marsh	0	0

Background:

EEP has been very active in this CU developing an LWP. Local governments have been involved throughout the LWP process and were very cooperative on the possible projects; however, individual property owners have not expressed much interest in participating in mitigation projects. Numerous potential projects were identified during the development of the LWP, and EEP has contacted multiple landowners. Potential opportunities for traditional wetland restoration are decreasing in this CU and EEP may need to approach the IRT to discuss the possibility of implementing a nontraditional wetland mitigation project to meet needs. There are no riparian wetland credits available in the adjacent CU of the Lumber River basin.

CU Immediate Action Plan:

EEP issued an RFI for stream and riparian wetland mitigation credits in this CU but did not receive a response. Due to the scarcity of opportunities and the small nature of the present and expected future mitigation requirements, EEP plans to discuss with the IRT the potential of developing a larger service area and larger mitigation site that can service Lumber 03040207 and Lumber 03040206.

CU Long-Range Action Plan:

There are some additional small stream and riparian wetland mitigation needs in this watershed. EEP and NCDOT plan to draft and submit to the IRT for approval a joint mitigation strategy to meet any future stream and riparian mitigation requirements in this watershed.

NEUSE 03020201

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	21.03 ac	0
Nutrient Offset	0	0

Background:

Neuse 03020201 continues to be a high demand CU for stream, wetland and riparian buffer mitigation needs. However, because of increased mitigation banking presence in the watershed, EEP receives new mitigation requirements on an irregular basis. EEP currently has a total of 277 stream and wetland mitigation requirements (117 stream, 122 riparian wetland, and 38 non-riparian wetland requirements) that total 105,821 stream mitigation credits, 129.13 riparian wetland mitigation credits and 53.78 non-riparian wetland mitigation credits. All of the current stream and wetland mitigation requirements are completely met. There are 241 buffer mitigation requirements that total 368.21 acres of buffer mitigation (94 percent compliant). Of the 241 buffer mitigation requirements, there are eight requirements that are partially met with existing buffer mitigation assets and there are nine requirements that are unmet. EEP has no outstanding nutrient offset requirements in this CU.

Even with the high growth ongoing in this CU, EEP believes there is still opportunity to do restoration mitigation work throughout the CU. EEP has been very active in this CU and has developed four LWPs and has a good network of contacts in the local governments and stakeholder groups. EEP is in the process of developing a new regional watershed plan targeting stream and buffer restoration opportunities to meet long term mitigation needs for the NCDOT (Southern and Eastern Wake Expressway projects).

CU Immediate Action Plan:

EEP issued a FD RFP for 30 buffer mitigation credits in November 2011 that was received in April 2012. This was the first time EEP has requested buffer mitigation through this FD RFP process since 2005. One response was received and EEP has initiated review of the technical proposal. If the mitigation project is viable, then EEP anticipates executing contracts before end of 2012. Although the project under review is large, the project, if accepted and a contracted, is insufficient to meet all of the current outstanding buffer mitigation requirements. Consequently, EEP plans to issue a FD RFP for the remaining buffer mitigation needs in 2013.

CU Long-Range Action Plan:

NCDOT's Southern Wake Expressway project was placed on hold over a year ago because there were not two viable alternatives to study in accordance with the National Environmental Policy Act (NEPA). Recently, EEP learned that the issues with the viable alternative may be close to a resolution and anticipates the

project to re-start sometime in 2013 and possibly be accelerated. Given the potential for an accelerated road implementation schedule, EEP may need to aggressively utilize all procurement methods to institute sufficient amount of stream, wetland and buffer mitigation credits to meet the mitigation needs associated with the Southern Wake Expressway project as well as the Eastern Wake Expressway that will follow after construction of the southern portion. Currently, NCDOT has not ordered any mitigation for these two road projects.

ROANOKE 03010103

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0.133	0.133
Non-riparian	0	0
Coastal Marsh	0	0

Background:

Historically there has been very little disturbance activity associated with wetlands and therefore little need for wetland mitigation in this CU since the inception of the WRP in 1998. To date, EEP is responsible for 10 stream mitigation requirements totaling 8,421 credits and three riparian wetland mitigation requirements. Currently one riparian requirement is noncompliant (see above table) and two are temporarily satisfied with advance credits. EEP has implemented two stream mitigation projects in this CU. Neither stream project contained wetland mitigation credits.

The potential for some additional requirements in the near future exists as EEP has received several small requests from developers to participate in the Statewide Stream and Wetland ILF Program over the past year. Currently these applicants remain unpermitted.

CU Immediate Action Plan:

During the fiscal year, EEP issued an RFI for stream and riparian wetland mitigation credits in this CU but no submittals were received.

Given the small nature of the existing and expected future requirements and due to the lack of historical mitigation needs in the upper Roanoke River Basin, EEP plans to request the IRT consider a larger service area for the Upper Roanoke River Basin that combines the 02, 03 and 04 CUs into a single service area. If the larger service area is accepted, then EEP plans to issue a FD RFP for stream and riparian wetland that will be sufficient to meet all of the mitigation needs for Roanoke 02, 03 and 04.

CU Long-Range Action Plan:

Statewide ILF program has future riparian wetland mitigation requirements that total 0.66 riparian wetland mitigation credits. NCDOT has projected one future riparian wetland mitigation requirement in this watershed in the amount of 0.07 riparian wetland mitigation credits.

ROANOKE 03010104

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0.642	0
Non-riparian	0.21	0
Coastal Marsh	0	0

Background:

Roanoke 04 history is very similar to Roanoke 03. Historically there has been very little disturbance activity associated with streams or wetlands and therefore little need for stream and/or wetland mitigation in this CU since the inception of the WRP in 1998. To date, EEP is responsible for one stream mitigation requirement totaling 81 credits, four riparian wetland mitigation requirements that are partially noncompliant, and one non-riparian wetland mitigation requirement (see above table). EEP has implemented two stream mitigation projects in this CU. Neither stream project contained wetland mitigation credits.

CU Immediate Action Plan:

During the fiscal year, EEP issued an RFI for riparian wetland mitigation credits in this CU but did not receive any submittals.

Given the small nature of the existing and expected future requirements and due to the lack of historical mitigation needs in the upper Roanoke River Basin, EEP plans to request the IRT consider a larger service area for the Upper Roanoke River Basin that combines the 02, 03 and 04 CUs into a single service area. If the larger service area is accepted, then EEP plans to issue a FD RFP for stream and riparian wetland that will be sufficient to meet all of the mitigation needs for Roanoke 02, 03 and 04.

CU Long-Range Action Plan:

Statewide ILF program does not have any future riparian wetland mitigation requirements at this time. NCDOT ILF program has three future riparian wetland mitigation requirements in this watershed in the amount of 6.50 riparian wetland mitigation credits and then there are additional projected riparian wetland mitigation needs of 0.60 riparian wetland credits.

TAR-PAMLICO 03020101

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	6.40 ac	0
Nitrogen	11,340.23 lb	N/A
Phosphorus	735.98 lb	N/A

CU Immediate Action Plan:

EEP has identified a site in this CU that will partially satisfy the current need for buffer, nitrogen and phosphorus credit. In addition, EEP issued an RFP for FD mitigation in July 2012 to provide the remaining unmet and future mitigation needs. The FD RFP submittal date is October 2012. Since this watershed does not have a scarcity of viable potential mitigation sites, EEP is optimistic that all remaining requirements will be satisfied in the next fiscal year. **TAR-PAMLICO 03020104**

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	4.56 ac	0
Nitrogen	0	0
Phosphorus	0	0

Background:

This CU has become problematic in delivering stream and riparian buffer mitigation because of the lack of streams located within the CU and the difficulty in producing projects that comply with the existing Coastal Stream Mitigation Guidance. Compliance for stream mitigation in this CU has fluctuated over the past three years. EEP has pursued and contracted several FD mitigation projects, only to lose the projects within a few months of contracting because of the projects' inability to comply with the Coastal Stream Mitigation Guidance. During the past 18 months, EEP contracted two additional FD projects sufficient to satisfy all of the current stream mitigation requirements once the credits are released. EEP has applied advanced stream mitigation credits as required by EEP's ILF Instrument to the stream mitigation requirements while these projects move through their credit release schedule. Currently all stream mitigation requirements in this CU are met.

Buffer mitigation remains an issue in this CU. EEP has issued multiple FD RFPs since 2004 and has only contracted one project that has generated riparian buffer mitigation credits. The most recent FD RFP was received in October 2012 and no potential projects were submitted. Mitigation providers have stated that they were unable to locate any suitable projects in this region. EEP staff has also canvassed the area and also have concluded that riparian buffer mitigation opportunities (as currently defined) are scarce to non-existent.

CU Immediate Action Plan:

EEP has notified DWQ of the scarcity of mitigation opportunities and sought to identify alternative buffer mitigation solutions to address the historical requirements in this CU. Additional discussions are needed. Options that may be considered include utilizing buffers wider than 50 feet, establishing riparian buffers along streams not identified on USGS maps or NRCS soil surveys, preservation of riparian buffers, utilizing existing nutrient offset credits, and establishment of buffers along drainages that connect to streams.

Over the last several years, EEP only accepts new riparian buffer mitigation requirements on the condition that they may be mitigated in Tar-Pamlico 03, 04 and/or 05.

CU Long-Range Action Plan:

There are sufficient stream and wetland mitigation credits available in this CU to meet current and future projected mitigation needs. EEP will schedule a meeting with DWQ to discuss the long-term solution for delivering buffer mitigation in the lower Tar-Pamlico River basin.

TAR-PAMLICO 03020105

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	0	0
Coastal Marsh	0	0
Riparian Buffer	2.21 ac	0

Background:

Until 2005, the Tar-Pamlico 03020105 CU had virtually no wetland or stream activity since the inception of the WRP in 1997. Prior to 2005, EEP had only accepted one conservation easement to hold on behalf of USACE. Between 2005 and 2007, activity was high, mostly for non-riparian wetland mitigation. EEP received payments for three riparian wetland requirements, 41 non-riparian wetland requirements and one coastal marsh requirement. Most of the requirements stem from payments made into the Statewide Stream and Wetland ILF Program. The NCDOT Stream and Wetland ILF Program has had only one permit issued in this CU which required stream and non-riparian wetland mitigation. Currently, all 46 of the wetland mitigation requirements have been met. Although activity has been high, the magnitude of each individual requirement is very small.

The unmet riparian buffer requirements in this CU originated from an audit of the EEP buffer assets when DWQ determined that certain buffered conveyances on EEP projects did not meet the regulatory requirements for riparian buffer mitigation. Debits to sites originally intended to meet paid requirements were removed leaving the Program with 15 unmet requirements in this CU totaling approximately 2.21 acres of need. The DWQ audit noted that these projects were excellent nutrient removal projects and EEP transferred these projects to EEP's Nutrient Offset ILF Program. The total buffer mitigation requirement has decreased by 0.04 acre from last year due to a refund issued to an applicant.

CU Immediate Action Plan:

EEP has notified DWQ of the scarcity of mitigation opportunities and sought to identify alternative buffer mitigation solutions to address the historical requirements in this CU. Additional discussions are needed. Options that may be considered include utilizing buffers wider than 50 feet, establishing riparian buffers along streams not identified on USGS maps or NRCS soil surveys, preservation of riparian buffers, utilizing existing nutrient offset credits, and establishment of buffers along drainages that connect to streams.

Over the last several years, EEP only accepts new riparian buffer mitigation requirements on the condition that they may be mitigated in Tar-Pamlico 03, 04 and/or 05.

CU Long-Range Action Plan:

There are no projected stream or wetland mitigation needs in this CU. EEP will schedule a meeting with DWQ to discuss the long-term solution for delivering buffer mitigation in the lower Tar-Pamlico River basin.

WHITE OAK 03030001

Outstanding Mitigation Required

Description	Restoration	Restoration Equivalent
Stream	0	0
Riparian	0	0
Non-riparian	5.779 (4.329)	1.838 (1.838)
Coastal Marsh	0	0

Background:

Over the past several years, wetland mitigation needs in this CU have remained consistent with most of the mitigation needs located within the Onslow County portion of the CU. All of current outstanding non-riparian wetland mitigation requirements listed above are for impacts located outside of Onslow County (New Hanover or Pender Counties). The Hoffman Mitigation Bank has a service area of Onslow County (portions of White Oak 03030001 and 03020106). Since the Hoffman Mitigation Bank has been authorized to offset mitigation outside its specified service area multiple times, EEP requested IRT permission to utilize Hoffman credits to offset outstanding requirements but was denied. EEP has had challenges in this CU implementing mitigation projects from the White Oak LWP because of the lack of landowner response or willingness to participate in a wetland restoration project. The White Oak LWP contains opportunities to pursue nontraditional forms of mitigation that may be more appropriate for this watershed. EEP has presented the nontraditional forms of mitigation available in this watershed to the IRT multiple times between 2008 and 2010. Additional discussions related to nontraditional forms of mitigation between EEP and IRT will be necessary before EEP can pursue these alternatives.

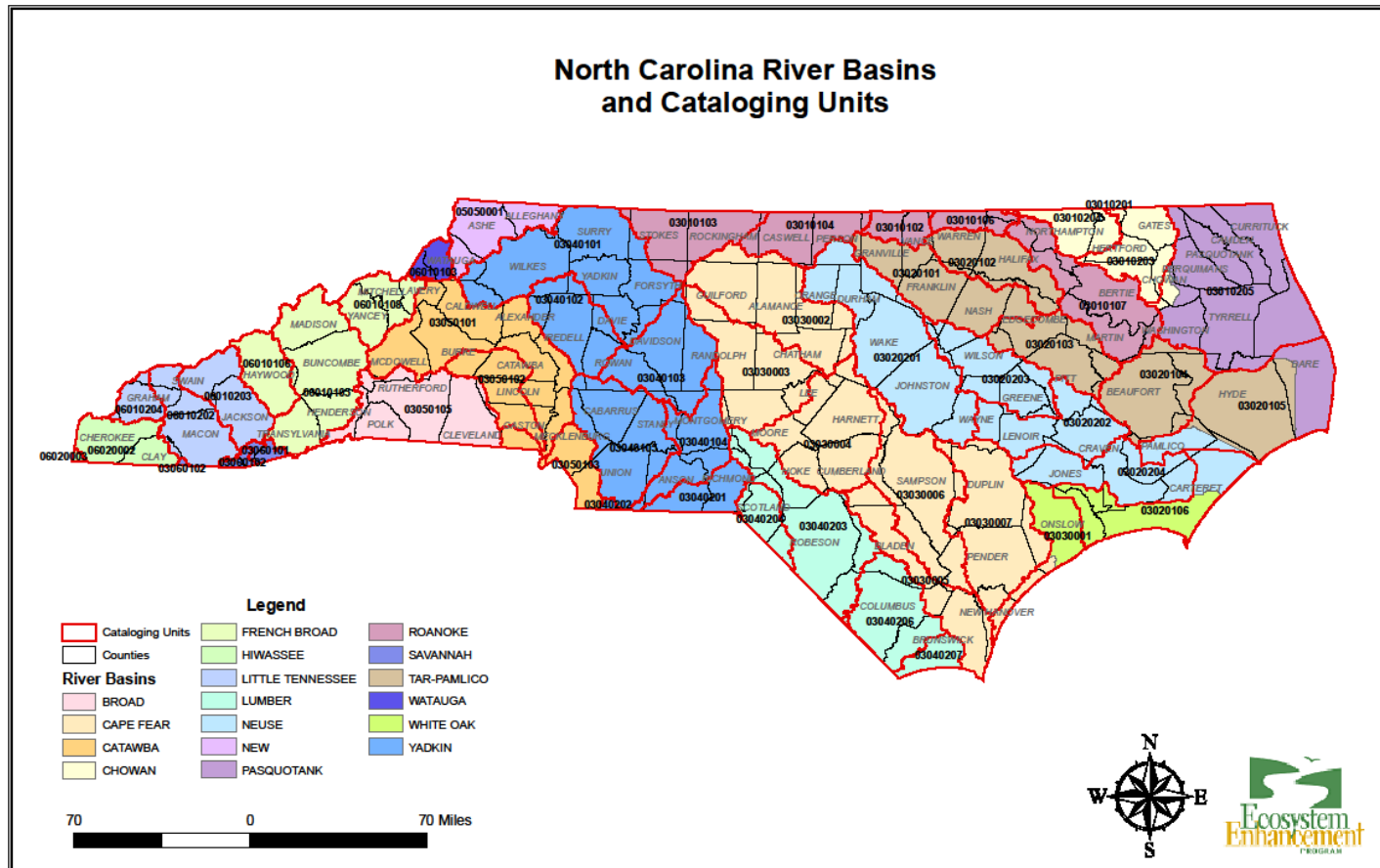
CU Immediate Action Plan:

EEP has made three purchases of non-riparian wetland mitigation credits from the Hoffman Mitigation Bank. There are additional non-riparian wetland mitigation credits available to purchase from the Hoffman Mitigation Bank; however, all of the current outstanding non-riparian mitigation requirements are associated with impacts located in New Hanover or Pender counties. The last FD RFP round has yielded one new non-riparian wetland mitigation project containing approximately 10 non-riparian wetland credits and EEP is in the process of executing the contract. Once the project is secured, then advance credits will be applied to the current outstanding mitigation requirements while the project goes through its credit release process. The new mitigation project has sufficient non-riparian wetland mitigation credits to meet all outstanding mitigation needs.

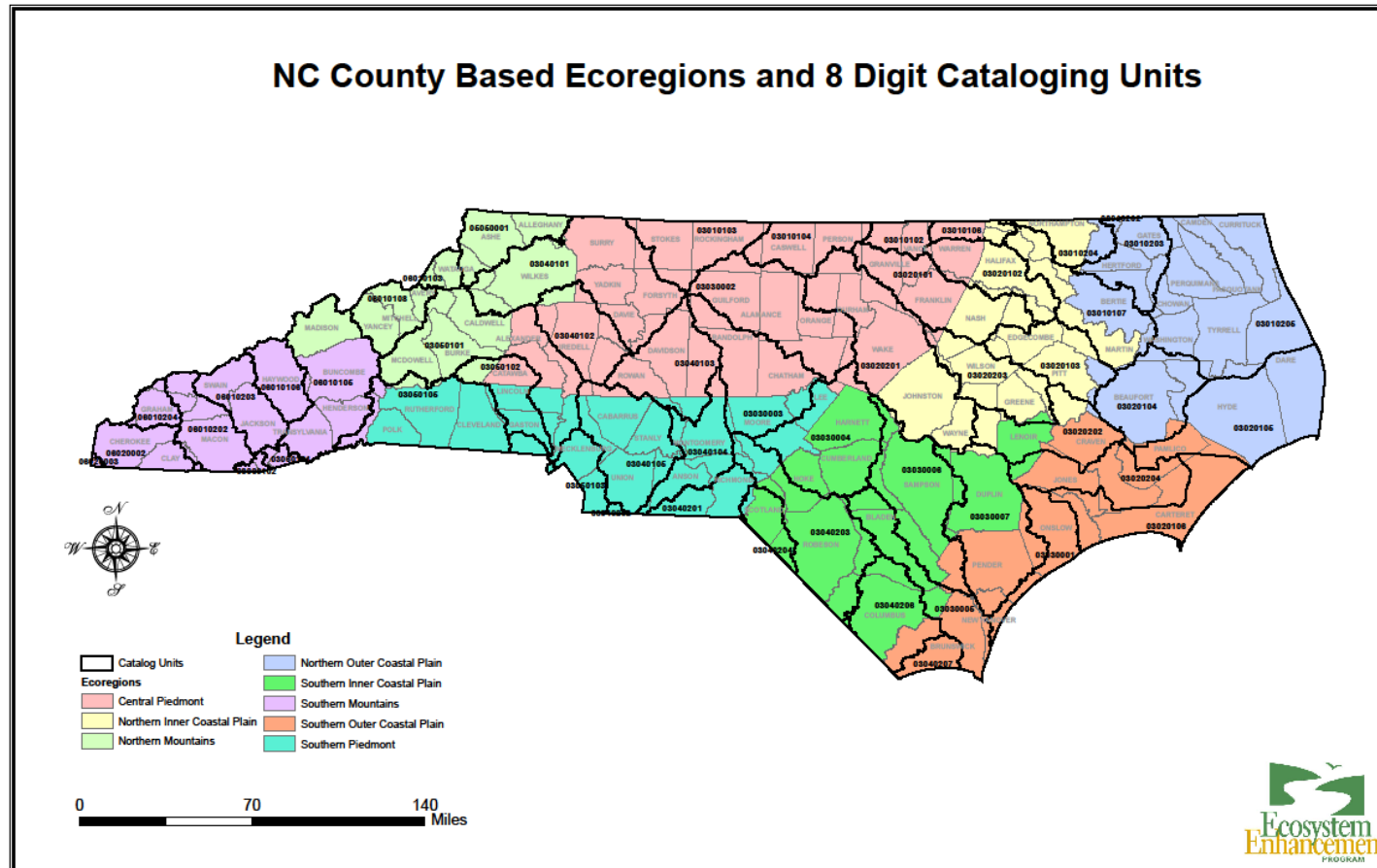
CU Long-Range Action Plan:

The future anticipated non-riparian wetland mitigation needs in this CU are small for both the NCDOT ILF and Statewide ILF programs. The anticipated mitigation credits from the new non-riparian wetland mitigation site will be sufficient to meet the current outstanding mitigation needs plus the projected future mitigation needs.

USGS River Basins and Eight-Digit CU Map



NCEEP Ecoregion and Eight-Digit CU Map



Appendices

Appendix I. EEP's NCDOT Stream and Wetland ILF Program

This appendix provides links to individual tables reporting data for fiscal 2011-12 for the Ecosystem Enhancement Program's NCDOT Stream and Wetland ILF Program. A [complete appendix](#) file with all of these tables in one larger document is also available.

Appendix I.A: NCDOT Stream and Wetland ILF Program Project Lists

[Appendix I.A.1. NCDOT Stream and Wetland ILF Program - Project List](#)

[Appendix I.A.2. NCDOT Stream and Wetland ILF Program - High Quality Preservation Project List](#)

Appendix I.B: NCDOT Stream and Wetland ILF Program Gross Asset Summaries

[Appendix I.B.1. NCDOT Stream and Wetland ILF Program - Gross Asset Summary](#)

[Appendix I.B.2. NCDOT Stream and Wetland ILF Program - Gross HQP Asset Summary](#)

Appendix I.C: NCDOT Stream and Wetland ILF Program Net Asset Summaries

[Appendix I.C.1. NCDOT Stream and Wetland ILF Program - Net Asset Summary](#)

[Appendix I.C.2. NCDOT Stream and Wetland ILF Program - HQP Net Asset Summary](#)

Appendix I.D: NCDOT Stream and Wetland ILF Program Requirements and Asset Ledgers

[Appendix I.D.1. NCDOT Stream and Wetland ILF Program - Requirement Ledgers](#)

[Appendix I.D.2. Combined NCDOT and Statewide Stream and Wetland ILF Program - Asset Ledger](#)

[Appendix I.D.3. NCDOT Stream and Wetland ILF Program - High Quality Preservation Sites Asset Ledger](#)

Appendix I.E: Advanced Credits

[Appendix I.E.1. EEP Advance Credit Summary](#)

[Appendix I.E.2. EEP Advance Credit Ledger](#)

Appendix I.F: Outstanding NCDOT Stream and Wetland ILF Program Requirements

[Appendix I.F. NCDOT Stream and Wetland ILF Program - Outstanding Requirements](#)

Appendix II. EEP's Statewide Stream and Wetland ILF Program

This appendix provides links to individual tables reporting data for fiscal 2011-12 for the Ecosystem Enhancement Program's Statewide Stream and Wetland ILF Program.

Appendix II.A: Statewide Stream and Wetland ILF Program Project List

[Appendix II.A. Statewide Stream and Wetland ILF - Project List](#)

Appendix II.B: Statewide Stream and Wetland ILF Program Gross Asset Summary

[Appendix II.B. Statewide Stream and Wetland ILF Program - Gross Assets](#)

Appendix II.C: Statewide Stream and Wetland ILF Program Net Asset Summary

[Appendix II.C. Statewide Stream and Wetland ILF Program - Net Assets](#)

Appendix II.D: Statewide Stream and Wetland ILF Program Requirements and Asset Ledgers

[Appendix II.D.1. Statewide Stream and Wetland ILF Program - Requirements Ledger](#)

[Appendix II.D.2. Combined NCDOT and Statewide ILF Asset Ledgers](#)

Appendix I.E: Advanced Credits

[Appendix I.E.1. EEP Advance Credit Summary](#)

[Appendix I.E.2. EEP Advance Credit Ledger](#)

Appendix II.F Statewide Stream and Wetland ILF Program Outstanding Permit Requirements

[Appendix II.F. Statewide Stream and Wetland ILF Program - Outstanding Permit Requirements](#)

Appendix III. EEP's Riparian Buffer Mitigation ILF Program

This appendix provides links to individual tables reporting data for fiscal 2011-12 for the Ecosystem Enhancement Program's Riparian Buffer Mitigation ILF Program.

Appendix III.A: Riparian Buffer Mitigation ILF Program Project List

[Appendix III.A. Riparian Buffer Mitigation ILF Program Project List](#)

Appendix III.B Riparian Buffer Mitigation ILF Program Gross Asset Summary

[Appendix III.B. Riparian Buffer Mitigation ILF Program - Gross Asset Summary](#)

Appendix III.C Riparian Buffer Mitigation ILF Program Net Asset Summary

[Appendix III.C. Riparian Buffer Mitigation ILF Program - Net Asset Summary](#)

Appendix III.D: Riparian Buffer Mitigation ILF Program Requirements and Asset Ledgers

[Appendix III.D.1. Riparian Buffer Mitigation ILF Program - Requirements Ledger](#)

[Appendix III.D.2. Riparian Buffer Mitigation ILF Program - Asset Ledgers](#)

Appendix III.E: Outstanding Riparian Buffer Mitigation ILF Program Requirements

[Appendix III.E: Outstanding Riparian Buffer Mitigation ILF Program Requirements](#)

Appendix IV. EEP's Nutrient Offset ILF Program

This appendix provides links to individual tables reporting data for fiscal 2011-12 for the Ecosystem Enhancement Program's Nutrient Offset ILF Program.

Appendix IV.A: Nutrient Offset ILF Program Project List

[Appendix IV.A: Nutrient Offset Project List](#)

Appendix IV.B Nutrient Offset ILF Program Gross Asset Summary

[Appendix IV.B. Nutrient Offset ILF Program - Gross Asset Summary](#)

Appendix IV.C Nutrient Offset ILF Program Net Asset Summary

[Appendix IV.C. Nutrient Offset ILF Program - Net Asset Summary](#)

Appendix IV.D: Nutrient Offset ILF Program Requirements and Asset Ledgers

[Appendix IV.D.1. Nutrient Offset ILF Program - Requirements Ledger](#)

[Appendix IV.D.2. Nutrient Offset ILF Program - Asset Ledger](#)

Appendix IV.E. Outstanding Nutrient Offset ILF Program Requirements

[Appendix IV.E: Outstanding Nutrient Offset ILF Program Requirements](#)